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U.Z.: D 2436 DE

Training device

20 The present invention relates to a training device comprising a sound playback means and, in particular, a music playback device, and a training system and method.

25 Recently it has come into fashion to practice fitness, e.g. jogging, as leisure activities as compensation to the every-day work but also for building up the personal condition. In order to make these possibly monotone sporting activities more attractive and diversified, special music playback devices have been developed by the entertainment industry, which can be carried on the body during the fitness activity (e.g. jogging), so that simultaneously music can be listened to. Such special music playback devices have become commonly known as Walkman or Discman; appropriate radio devices have been developed, too. However, these music playback devices have the drawback of merely serving for reproducing corresponding media, such as cassettes or compact disks, which for example store music or audio plays. The played pieces of music and texts correspond to the preferences of each sportsman and are in no way associated with the achieved training of the personal condition and fitness.

30 Thus it is object of the invention to provide a training device, a training system and a training method which enable a purposeful and controlled training of the user.
35 This object is achieved with the features of the claims.

another user can be compared with own personal data (e.g. hobbies) in the own training device. If the compared data match at least partially this is indicated to the user by a corresponding signal.

5 The sound playback means used in the training device according to the invention or the music playback means is preferably a MP3 player, a Discman, a Walkman, a portable DAT device or a portable MiniDisc device. The sound playback means is preferably insensitive to shock.

10 The training device according to the invention outputs training information to the user preferably by means of voice output, e.g. information about pulse, elapsed time, pace information (e.g. elapsed distance), information about individual training units, etc.

15 The training information and training courses, respectively that can be compiled at the base station and transmitted to the training device are preferably adapted for different kinds of sport, such as jogging, marathon training, cycling, rowing, fitness programs (warm up followed by alternating units of running and gymnastics, etc.), roller blading.

According to the invention music compilations are provided (in the Internet) at a base station (e.g. computer having Internet access) which then can be combined individually, downloaded and employed for training on a conventional playback device or a playback device according to the invention (MP3 player).

Claims

1. Training device comprising:
 - a) a sound playback means;
 - b) a means for connecting the sound playback means with a training course detecting means; and
 - c) a means for outputting signals corresponding to the training course.
2. Training device according to claim 1, wherein the training device comprises the training course detecting means.
3. Training device according to claim 1 or 2, wherein the training course detecting means comprises at least one of a pulsimeter, pulsoxymeter, chronometer, timer and pedometer.
4. Training device according to claim 1, 2 or 3, wherein the training device further comprises a signal means.
5. Training device according to claim 4, wherein the signal means comprises at least one of a tone generator, a voice synthesizer and a visual signal generating means.
6. Training device according to claim 4 or 5, further comprising a controller for receiving the signal outputted from the output means corresponding to the training course, converting said signal into corresponding training information and transmitting these training information to the signal means.
7. Training device according to claim 6, wherein the signal means outputs the received training information.
8. Training device according to any one of claims 1 to 7, wherein the sound playback means is adapted for playing music and/or voice.

9. Training device according to claim 8, wherein the sound playback means reproduces training information in the form of voice or signals.
10. Training device according to any one of claims 1 to 9, wherein the sound
5 playback means is a MP3 player, a Diskman, a Walkman, a portable DAT device or a portable MiniDisc device.
11. Training device according to any one of claims 1 to 10, further comprising a head
10 set.
12. Training device according to any one of claims 1 to 11, further comprising a means for connecting the training device with a base station.
13. Training device according to any one of claims 1 to 12, further comprising means
15 for storing and transmitting personal data of the user of the training device.
14. Training device according to any one of claims 1 to 13, further comprising a means for receiving personal data of a user of another training device.
- 20 15. Training device according to claim 14, further comprising a means for comparing the received personal data with the stored own personal data and for outputting a signal if the compared data at least partially match.
- 25 16. Training device according to any one of claims 1 to 15, further comprising a microphone for recording the voice of the user of the training device and a transmitter means for transmitting the recorded information to further training devices.
- 30 17. Music playback means particularly according to any one of claims 1 to 16 comprising a means for outputting a beat.
18. Music playback means according to claim 17, wherein the beat output means is adapted for providing a variable beat.

19. Music playback means according to claim 17 or 18, wherein the beat output means outputs the beat corresponding to the cardiac rhythm.

20. Training system comprising:

5 a) a training device according to any one of claims 1 to 16; and

b) a means for providing training information adapted for use in said training device.

10 21. Training system according to claim 20, wherein the means for providing training information is a base station.

22. Training system according to claim 21, wherein the base station is a computer having Internet access.

15 23. Training system according to claim 22, wherein the training information comprise music and/or voice downloaded from the Internet.

24. Training method comprising the steps of:

a) providing a means comprising training information;

20 b) providing a training device particularly according to any one of claims 1 to 16; and

c) transmitting said training information from the means comprising training information to the training device.

25 25. Method according to claim 24, wherein the step of providing training information comprises the step of downloading training information from the Internet.

26. Method according to claim 24 or 25, wherein the step of providing training information comprises composing an individual training program.

30 27. Method according to claim 24, 25 or 26, wherein the training information comprise music and/or voice.

28. Providing music compilations in the Internet for a training device according to any one of claims 1 to 16, for a music playback means according to any one of claims 17 to 19 or a training method according to any one of claims 20 to 27.

Abstract

Training device

5 A training device comprises a sound playback means, a means for connecting the sound playback means with a training course detecting means and a means for outputting a signal corresponding to the training course.